## **AMENDMENTS TO THE CLAIMS**

Claims 1 and 9 have been amended, and claims 21-24 have been added. The following is a complete listing of the claims, which replace all previous versions and listings of the claims.

- 1. (currently amended) A method for operating a computing device, comprising: tabulating resources of the computing device into one or more resource tables;
- allocating resources from one or more of the resource tables of the computing device—to a plurality of resource sets prior to loading a desired O/S layer for the computing device—wherein allocating resources comprises cloning a portion of the resources and allocating the original portion of the resources and a clone portion of the resources to different resource sets; and

loading a desired operating system on each set of the plurality of resource sets at the desired O/S layer.

- 2. (original) The method of claim 1, wherein allocating resources comprises organizing the resources in a ROM-based environment.
- 3. (original) The method of claim 2, wherein organizing the resources in the ROM-based environment comprises gathering device data from a BIOS module.
- 4. (original) The method of claim 1, wherein allocating resources comprises dividing the resources in an initialization phase of the computing device.
- 5. (original) The method of claim 4, wherein allocating resources comprises sharing at least a portion of the resources.

- 6. (original) The method of claim 1, wherein allocating resources comprises identifying and initializing at least a portion of the resources.
- 7. (original) The method of claim 1, wherein allocating comprises manually selecting desired allocations of the resources via a user interface.
- 8. (original) The method of claim 1, comprising running multiple desired operating systems at the desired O/S layer on the computing device.
- 9. (currently amended) A method for simultaneously supporting a plurality of independent operating systems on a computing device, comprising:
  - cataloguing resources of the computing devices prior to O/S booting for the computing device;
  - dividing the resources into multiple subsets prior to O/S booting wherein dividing the resources comprises partitioning the resources with an extensible firmware interface cloning a portion of the resources and allocating the original portion of the resources and the cloned portion of the resources to different subsets; and
  - loading the plurality of independent operating systems, at least one O/S being loaded on each resource set of the multiple subsets.
- 10. (original) The method of claim 9, wherein the plurality of independent operating systems provide independent platforms for loading and running application software.
- 11. (original) The method of claim 10, wherein cataloguing, dividing and loading are performed in an initialization phase of the computing device.

- 12. (original) The method of claim 9, wherein dividing the resources comprises allocating desired portions of hardware and system services to each of the multiple subsets.
- 13. (original) The method of claim 12, wherein allocating desired portions of hardware and system services comprises sharing the system services between the multiple subsets and the independent operating systems loaded thereon.
  - 14. (previously presented) A system for booting a computing device, comprising: an extensible firmware interface comprising:
    - a resource tabulator module configured to organize data on system resources for the computing device; and
    - a resource divider module configured to create multiple resource sets for the computing device; and
    - an operating system loader module configured to load a desired operating system on each of the multiple resource sets.
- 15. (original) The system of claim 14, wherein the resource tabulator module and the resource divider module are disposed in a pre-boot environment.
- 16. (original) The system of claim 15, wherein the resource tabulator module and the resource divider module are disposed in ROM.
- 17. (original) The system of claim 14, wherein the pre-boot environment comprises hardware detection modules for the system resources.

- 18. (original) The system of claim 14, wherein the pre-boot environment comprises hardware driver modules for the system resources.
- 19. (original) The system of claim 14, wherein the resource divider module comprises a user interface.
- 20. (original) The system of claim 14, wherein the resource divider module comprises a hardware partitioning module.
  - 21. (new) A system comprising:
  - a resource tabulator module configured to obtain resource tables associated with a computing device;
  - a resource divider module configured to create multiple resource sets from the resource tables;
  - an operating system loader module configured to load a desired operating system on each of the multiple resource sets; and
  - an interrupt controller module configured to detect and deliver interrupts to at least one of the operating systems through a peripheral components interconnect ("PCI") bus.
- 22. (new) The system of claim 21, comprising redirection registers, wherein the interrupt controller module is configured to communicate through the PCI bus via the redirection registers.
- 23. (new) The system of claim 22, wherein the redirection registers comprise extended identifiers for identifying a processor within one of the resource sets.

24. (new) The system of claim 21, wherein the interrupt controller module comprises a legacy system.